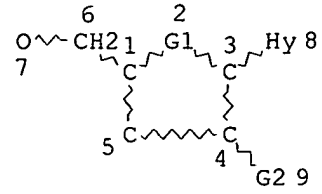
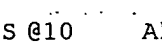
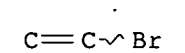
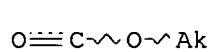
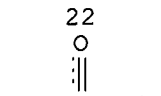
```
=> d que
L1   (    397655)SEA FILE=REGISTRY ABB=ON  PLU=ON  NC5/ESS AND (N2C3 OR NCNC2
                 OR N3C2 OR N2CNC)/ESS
L2   (     26241)SEA FILE=REGISTRY ABB=ON  PLU=ON  L1 AND (OC4 OR C5 OR SC4)/ES

L3                STR
```

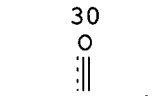


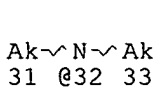


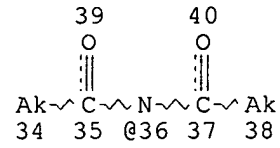


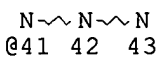













```
VAR G1=O/10/SO2/CH2
VAR G2=OH/11/41/CN/12/16/19/23/X/NO2/NH2/25/27/32/36
NODE ATTRIBUTES:
CONNECT IS E2  RC AT  10
CONNECT IS E1  RC AT  11
CONNECT IS E1  RC AT  18
CONNECT IS E1  RC AT  21
CONNECT IS E1  RC AT  24
CONNECT IS E1  RC AT  26
CONNECT IS E1  RC AT  29
CONNECT IS E1  RC AT  31
CONNECT IS E1  RC AT  33
CONNECT IS E1  RC AT  34
CONNECT IS E1  RC AT  38
DEFAULT MLEVEL IS ATOM
GGCAT   IS PCY  UNS  AT   8
DEFAULT ECLEVEL IS LIMITED
ECOUNT  IS M2 N  AT   8

GRAPH ATTRIBUTES:
RSPEC   4
NUMBER OF NODES IS  43

STEREO ATTRIBUTES: NONE
L4          3150 SEA FILE=REGISTRY SUB=L2 SSS FUL L3
L26        17474 SEA FILE=EMBASE ABB=ON  PLU=ON  FLAVIVIRUS+NT/CT
L27            6 SEA FILE=EMBASE ABB=ON  PLU=ON  L4 AND L26
```

=> d l27 ibib ab hitind 1-6

L27 ANSWER 1 OF 6 EMBASE COPYRIGHT 2004 ELSEVIER INC. ALL RIGHTS RESERVED.
on STN

ACCESSION NUMBER: 2003338483 EMBASE
TITLE: Preventive and therapeutic approaches to viral agents of bioterrorism.
AUTHOR: Bronze M.S.; Greenfield R.A.
CORPORATE SOURCE: M.S. Bronze, Division of Infectious Diseases, Univ. of OK Health Sciences Center, Oklahoma City Vet. Admin. Med. Ctr., Oklahoma City, OK, United States. Michael-Bronze@ouhsc.edu
SOURCE: Drug Discovery Today, (15 Aug 2003) 8/16 (740-745). Refs: 60
ISSN: 1359-6446 CODEN: DDTOFS
PUBLISHER IDENT.: S 1359-6446(03)02778-8
COUNTRY: United Kingdom
DOCUMENT TYPE: Journal; General Review
FILE SEGMENT: 004 Microbiology
030 Pharmacology
037 Drug Literature Index
038 Adverse Reactions Titles
LANGUAGE: English
SUMMARY LANGUAGE: English
AB Certain viruses, such as those that cause smallpox and hemorrhagic fevers, have been identified as possible bioterrorism agents by the Centers for Disease Control and Prevention. They have been designated as potential threats because large quantities can be propagated in cell culture, they are transmissible as aerosols and, for the most part, there are only limited vaccine and pharmaceutical strategies for either prevention or treatment of established infection. An additional concern is the potential to genetically modify these agents to enhance virulence or promote resistance to vaccines or identified antivirals. Although the major impact of these agents is human illness, the release of zoonotic agents, such as the Nipah virus, would have consequences for both humans and animals because infected and noninfected animals might need to be sacrificed to control the spread of infection. Continued research is necessary to develop effective strategies to limit the impact of these biological threats.
CT Medical Descriptors:
*virus infection: DT, drug therapy
*infection prevention
biological warfare
pathogenesis
exposure
vaccination
chemoprophylaxis
virus strain
drug safety
drug efficacy
side effect: SI, side effect
antiviral activity
immunity
smallpox: DT, drug therapy
smallpox: PC, prevention
hemorrhagic fever: DT, drug therapy

hemorrhagic fever: ET, etiology
herpes simplex keratitis: DT, drug therapy
chronic hepatitis: DT, drug therapy
hepatitis B: DT, drug therapy
hepatitis C: DT, drug therapy
hepatitis C: ET, etiology
Hepatitis B virus
Hepatitis C virus
human
nonhuman
review
Drug Descriptors:
*antivirus agent: AE, adverse drug reaction
*antivirus agent: DT, drug therapy
*antivirus agent: PD, pharmacology
smallpox vaccine: AE, adverse drug reaction
smallpox vaccine: DT, drug therapy
smallpox vaccine: PD, pharmacology
vidarabine: DT, drug therapy
vidarabine: PD, pharmacology
cytarabine: DT, drug therapy
cytarabine: PD, pharmacology
aciclovir: DT, drug therapy
aciclovir: PD, pharmacology
zidovudine: DT, drug therapy
zidovudine: PD, pharmacology
didanosine: DT, drug therapy
didanosine: PD, pharmacology
efavirenz: DT, drug therapy
efavirenz: PD, pharmacology
proteinase inhibitor: DT, drug therapy
proteinase inhibitor: PD, pharmacology
cidofovir: DT, drug therapy
cidofovir: PD, pharmacology
cidofovir: IH, inhalational drug administration
cidofovir: SC, subcutaneous drug administration
vaccinia vaccine: DT, drug therapy
vaccinia vaccine: PD, pharmacology
gemcitabine: DT, drug therapy
gemcitabine: PD, pharmacology
trifluridine: DT, drug therapy
trifluridine: PD, pharmacology
idoxuridine: DT, drug therapy
idoxuridine: PD, pharmacology
adefovir dipivoxil: DT, drug therapy
adefovir dipivoxil: PD, pharmacology
antiserum: CB, drug combination
antiserum: DT, drug therapy
antiserum: PD, pharmacology
chlorpromazine: DT, drug therapy
chlorpromazine: PD, pharmacology
trifluoperazine: DT, drug therapy
trifluoperazine: PD, pharmacology
ribamidine: DT, drug therapy
ribamidine: PD, pharmacology
5 ethynyl 4 imidazolecarboxamide 1 riboside: DT, drug therapy
5 ethynyl 4 imidazolecarboxamide 1 riboside: PD, pharmacology

adenosylhomocysteinase inhibitor: DT, drug therapy
adenosylhomocysteinase inhibitor: PD, pharmacology
3 deazaaristeromycin: DT, drug therapy
3 deazaaristeromycin: PD, pharmacology
ribavirin: CB, drug combination
ribavirin: DT, drug therapy
ribavirin: PD, pharmacology

RN (vidarabine) 2006-02-2, 5536-17-4; (cytarabine) 147-94-4, 69-74-9; (aciclovir) 59277-89-3; (zidovudine) 30516-87-1; (didanosine) 69655-05-6; (efavirenz) 154598-52-4; (proteinase inhibitor) 37205-61-1; (cidofovir) 113852-37-2; (gemcitabine) 103882-84-4; (trifluridine) 70-00-8; (idoxuridine) 54-42-2; (adefovir dipivoxil) 142340-99-6; (chlorpromazine) 50-53-3, 69-09-0; (trifluoperazine) 117-89-5, 440-17-5; (ribamidine) 119567-79-2, 40372-00-7; (5 ethynyl 4 imidazolecarboxamide 1 riboside) 118908-07-9; (3 deazaaristeromycin) **58316-88-4**; (ribavirin) 36791-04-5

L27 ANSWER 2 OF 6 EMBASE COPYRIGHT 2004 ELSEVIER INC. ALL RIGHTS RESERVED. on STN

ACCESSION NUMBER: 2002219563 EMBASE
TITLE: Identification of active antiviral compounds against a New York isolate of West Nile virus.
AUTHOR: Morrey J.D.; Smee D.F.; Sidwell R.W.; Tseng C.
CORPORATE SOURCE: J.D. Morrey, Department of Animal Science, Institute for Antiviral Research, Utah State University, Logan, UT 84322-4700, United States. jmorrey@cc.usu.edu
SOURCE: Antiviral Research, (2002) 55/1 (107-116).
Refs: 37
ISSN: 0166-3542 CODEN: ARSRDR
PUBLISHER IDENT.: S 0166-3542(02)00013-X
COUNTRY: Netherlands
DOCUMENT TYPE: Journal; Article
FILE SEGMENT: 004 Microbiology
030 Pharmacology
037 Drug Literature Index
LANGUAGE: English
SUMMARY LANGUAGE: English

AB The recent West Nile virus (WNV) outbreak in the United States has increased the need to identify effective therapies for this disease. A chemotherapeutic approach may be a reasonable strategy because the virus infection is typically not chronic and antiviral drugs have been identified to be effective in vitro against other flaviviruses. A panel of 34 substances was tested against infection of a recent New York isolate of WNV in Vero cells and active compounds were also evaluated in MA-104 cells. Some of these compounds were also evaluated in Vero cells against the 1937 Uganda isolate of the WNV. Six compounds were identified to be effective against virus-induced CPE with 50% effective concentrations (EC(50)) less than 10 μg/ml and with a selectivity index (SI) of greater than 10. Known inhibitors of orotidine monophosphate decarboxylase and inosine monophosphate dehydrogenase involved in the synthesis of GTP, UTP, and TTP were most effective. The compounds 6-azauridine, 6-azauridine triacetate, cyclopententylcytosine (CPE-C), mycophenolic acid and pyrazofurin appeared to have the greatest activities against the New York isolate, followed by 2-thio-6-azauridine. Anti-WNV activity of 6-azauridine was confirmed by virus yield reduction assay when the assay was performed 2 days after initial infection in Vero cells. The neutral red assay mean EC(50) of ribavirin was only 106 μg/ml with a mean SI of

9.4 against the New York isolate and only slightly more effective against the Uganda isolate. There were some differences in the drug sensitivities of the New York and Uganda isolates, but when comparisons were made by categorizing drugs according to their modes of action, similarities of activities between the two isolates were identified.

CT Medical Descriptors:
*antiviral activity
drug identification
West Nile flavivirus
Cercopithecidae
Vero cell
virus isolation
virus strain
strain difference
drug screening
drug efficacy
enzyme inhibition
assay
drug mechanism
nonhuman
controlled study
animal cell
embryo
article
priority journal
Drug Descriptors:
*antivirus agent: CM, drug comparison
*antivirus agent: PD, pharmacology
*inosinate dehydrogenase inhibitor: CM, drug comparison
*inosinate dehydrogenase inhibitor: PD, pharmacology
*enzyme inhibitor: CM, drug comparison
*enzyme inhibitor: PD, pharmacology
*orotidine 5' phosphate decarboxylase inhibitor: CM, drug comparison
*orotidine 5' phosphate decarboxylase inhibitor: PD, pharmacology
neutral red
orotidine 5' phosphate decarboxylase
ribavirin: CM, drug comparison
ribavirin: PD, pharmacology
azauridine: CM, drug comparison
azauridine: PD, pharmacology
azaribine: CM, drug comparison
azaribine: PD, pharmacology
pirazofurin: CM, drug comparison
pirazofurin: PD, pharmacology
azauridine derivative: CM, drug comparison
azauridine derivative: PD, pharmacology
3 deazaguanosine: CM, drug comparison
3 deazaguanosine: PD, pharmacology
mycophenolic acid: CM, drug comparison
mycophenolic acid: PD, pharmacology
ribamidine: CM, drug comparison
ribamidine: PD, pharmacology
selenazofurin: CM, drug comparison
selenazofurin: PD, pharmacology
tiazofurin: CM, drug comparison
tiazofurin: PD, pharmacology

1 (4,5 dihydroxy 3 hydroxymethyl 2 cyclopenten 1 yl)cytosine: CM, drug comparison
1 (4,5 dihydroxy 3 hydroxymethyl 2 cyclopenten 1 yl)cytosine: PD, pharmacology
hypericin: CM, drug comparison
hypericin: PD, pharmacology
suramin: CM, drug comparison
suramin: PD, pharmacology
fluorouridine: CM, drug comparison
fluorouridine: PD, pharmacology
9 (2,3 dihydroxypropyl)adenine: CM, drug comparison
9 (2,3 dihydroxypropyl)adenine: PD, pharmacology
3 deazaneplanocin A: CM, drug comparison
3 deazaneplanocin A: PD, pharmacology
6 bromotoyocamycin: CM, drug comparison
6 bromotoyocamycin: PD, pharmacology
formycin B: CM, drug comparison
formycin B: PD, pharmacology
thiouracil: CM, drug comparison
thiouracil: PD, pharmacology
azacitidine: CM, drug comparison
azacitidine: PD, pharmacology
cyclopentyluracil: CM, drug comparison
cyclopentyluracil: PD, pharmacology
5,6 dihydroazacitidine: CM, drug comparison
5,6 dihydroazacitidine: PD, pharmacology
uridine 2',3' dialdehyde: CM, drug comparison
uridine 2',3' dialdehyde: PD, pharmacology
unclassified drug

RN (neutral red) 553-24-2; (orotidine 5' phosphate decarboxylase) 9024-62-8; (ribavirin) 36791-04-5; (azauridine) 54-25-1; (azaribine) 2169-64-4; (pirazofurin) 30868-30-5; (3 deazaguanosine) **56039-11-3**; (mycophenolic acid) 23047-11-2, 24280-93-1; (ribamidine) 119567-79-2, 40372-00-7; (selenazofurin) 83705-13-9; (tiazofurin) 60084-10-8; (1 (4,5 dihydroxy 3 hydroxymethyl 2 cyclopenten 1 yl)cytosine) 90597-22-1; (hypericin) 548-04-9; (suramin) 129-46-4, 145-63-1; (fluorouridine) 316-46-1; (9 (2,3 dihydroxypropyl)adenine) 716-17-6; (3 deazaneplanocin A) 102052-95-9; (formycin B) 13877-76-4; (thiouracil) 141-90-2; (azacitidine) 320-67-2, 52934-49-3; (5,6 dihydroazacitidine) 62402-31-7, 62488-57-7

CO ICN (United States); National Cancer Institute (United States); Sigma (United States); Sangstat; Us army medical research institute for infectious diseases

L27 ANSWER 3 OF 6 EMBASE
on STN

ACCESSION NUMBER: 2001398755 EMBASE
TITLE: Viral hemorrhagic fever hazards for travelers in Africa.
AUTHOR: Isaacson M.
CORPORATE SOURCE: Dr. M. Isaacson, Private Bag X11, Bryanston 2021, South Africa. misaacson@worldonline.co.za
SOURCE: Clinical Infectious Diseases, (15 Nov 2001) 33/10 (1707-1712).
Refs: 39
ISSN: 1058-4838 CODEN: CIDIEL
COUNTRY: United States
DOCUMENT TYPE: Journal; General Review
FILE SEGMENT: 004 Microbiology

017 Public Health, Social Medicine and Epidemiology
035 Occupational Health and Industrial Medicine
037 Drug Literature Index

LANGUAGE: English
SUMMARY LANGUAGE: English

AB This short review covers 6 viral hemorrhagic fevers (VHFs) that are known to occur in Africa: yellow fever, Rift Valley fever, Crimean-Congo hemorrhagic fever, Lassa fever, Marburg virus disease, and Ebola hemorrhagic fever. All of these have at one time or another affected travelers, often the adventurous kind who are "roughing it" in rural areas, who should therefore be made aware by their physicians or travel health clinics about their potential risk of exposure to any VHF along their travel route and how to minimize the risk. A significant proportion of VHF cases involving travelers have affected expatriate health care workers who were nosocomially exposed in African hospitals or clinics. The VHFs are associated with a high case-fatality rate but are readily prevented by well-known basic precautions.

CT Medical Descriptors:
*virus hemorrhagic fever: DI, diagnosis
*virus hemorrhagic fever: DT, drug therapy
*virus hemorrhagic fever: EP, epidemiology
*virus hemorrhagic fever: PC, prevention
*virus hemorrhagic fever: TH, therapy
*yellow fever: DI, diagnosis
*yellow fever: DT, drug therapy
*yellow fever: EP, epidemiology
*yellow fever: PC, prevention
*Lassa fever: DI, diagnosis
*Lassa fever: DT, drug therapy
*Lassa fever: EP, epidemiology
*Lassa fever: PC, prevention
travel
Africa
Rift Valley fever bunyavirus
Yellow fever flavivirus
Nairo virus
Lassa virus
Marburg virus
Ebola virus
rural area
infection risk
health care personnel
occupational hazard
occupational exposure
hospital infection
fatality
infection prevention
differential diagnosis
blood transfusion
human
review
priority journal
Drug Descriptors:
*antivirus agent: AD, drug administration
*antivirus agent: DT, drug therapy
*antivirus agent: IV, intravenous drug administration
*antivirus agent: PO, oral drug administration

ribavirin: AD, drug administration
ribavirin: DT, drug therapy
ribavirin: IV, intravenous drug administration
ribavirin: PO, oral drug administration
immunoglobulin: DT, drug therapy
adenosylhomocysteinase inhibitor: DV, drug development
3 deazaaristeromycin: DV, drug development
RN (ribavirin) 36791-04-5; (immunoglobulin) 9007-83-4; (3 deazaaristeromycin) **58316-88-4**

L27 ANSWER 4 OF 6 EMBASE COPYRIGHT 2004 ELSEVIER INC. ALL RIGHTS RESERVED. on STN
ACCESSION NUMBER: 2001383236 EMBASE
TITLE: Hamao Umezawa Memorial Award Lecture 1 'An Odyssey in the Viral Chemotherapy Field'.
AUTHOR: De Clercq E.
CORPORATE SOURCE: E. De Clercq, Rega Institute for Medical Research, Katholieke Universiteit Leuven, Minderbroedersstraat 10, B-3000 Leuven, Belgium. erik.declerq@rega.kuleuven.ac.be
SOURCE: International Journal of Antimicrobial Agents, (2001) 18/4 (309-328).
Refs: 67
ISSN: 0924-8579 CODEN: IAAGEA
PUBLISHER IDENT.: S 0924-8579(01)00411-3
COUNTRY: Netherlands
DOCUMENT TYPE: Journal; Conference Article
FILE SEGMENT: 004 Microbiology
030 Pharmacology
037 Drug Literature Index
LANGUAGE: English
SUMMARY LANGUAGE: English

AB In the search of effective and selective chemotherapeutic agents for the treatment of viral infections, my 'Odyssey' brought me to explore a variety of approaches, encompassing interferon and interferon inducers, suramin and other polyanionic substances, S-adenosylhomocysteine hydrolase inhibitors, inosine 5'-monophosphate dehydrogenase inhibitors, 5-substituted 2'-deoxyuridines such as (E)-5-(2-bromovinyl)-2'-deoxyuridine, acyclovir (esters) and other acyclic guanosine analogues, 2',3'-dideoxynucleoside analogues, non-nucleoside reverse transcriptase inhibitors (NNRTIs), bicyclams, and acyclic nucleoside phosphonates. This had led to the identification of a number of compounds, efficacious against such important viral pathogens as human immunodeficiency virus (HIV), hepatitis B virus (HBV), hepatitis C virus (HCV), herpes simplex virus (HSV), varicella-zoster virus (VZV), cytomegalovirus (CMV), and other herpesviruses, pox-, adeno-, polyoma-, and papillomaviruses, and hemorrhagic fever viruses.

CT Medical Descriptors:
*virus infection: DT, drug therapy
*virus infection: PC, prevention
*RNA virus
*DNA virus
drug identification
drug efficacy
antiviral activity
Human immunodeficiency virus
Hepatitis B virus

Hepatitis C virus
Herpes simplex virus
Varicella zoster virus
Cytomegalovirus
Herpes virus
Poxvirus
Adenovirus
Polyoma virus
Papilloma virus
drug structure
drug potency
drug research
prophylaxis
human
nonhuman
conference paper
priority journal
Drug Descriptors:
*antiinfective agent
interferon: DT, drug therapy
interferon inducing agent: DT, drug therapy
interferon inducing agent: PD, pharmacology
suramin: DT, drug therapy
suramin: PD, pharmacology
suramin: IV, intravenous drug administration
polyanion
adenosylhomocysteinase inhibitor: DT, drug therapy
adenosylhomocysteinase inhibitor: PD, pharmacology
inosinate dehydrogenase inhibitor: DT, drug therapy
inosinate dehydrogenase inhibitor: PD, pharmacology
deoxyuridine derivative
5 (2 bromovinyl) 2' deoxyuridine: CM, drug comparison
5 (2 bromovinyl) 2' deoxyuridine: DT, drug therapy
5 (2 bromovinyl) 2' deoxyuridine: PD, pharmacology
aciclovir: CM, drug comparison
aciclovir: DT, drug therapy
aciclovir: PD, pharmacology
ester
guanosine derivative: AN, drug analysis
guanosine derivative: DT, drug therapy
guanosine derivative: PD, pharmacology
2',3' dideoxynucleoside derivative: DT, drug therapy
2',3' dideoxynucleoside derivative: PD, pharmacology
RNA directed DNA polymerase inhibitor: DT, drug therapy
RNA directed DNA polymerase inhibitor: PD, pharmacology
cyclam derivative: DT, drug therapy
cyclam derivative: PD, pharmacology
acyclic nucleoside: DT, drug therapy
acyclic nucleoside: PD, pharmacology
phosphonic acid derivative
9 (2,3 dihydroxypropyl)adenine: DT, drug therapy
9 (2,3 dihydroxypropyl)adenine: PD, pharmacology
ribavirin: DT, drug therapy
ribavirin: PD, pharmacology
polyacrylic acid: DT, drug therapy
polyacrylic acid: PD, pharmacology
polymethacrylic acid: DT, drug therapy

polymethacrylic acid: PD, pharmacology
dextran sulfate: DT, drug therapy
dextran sulfate: PD, pharmacology
polyvinyl alcohol sulfate: PD, pharmacology
polyacrylic acid vinyl alcohol sulfate: PD, pharmacology
polyvinyl sulfonate: PD, pharmacology
naphthalenesulfonic acid derivative: PD, pharmacology
3 deazaaristeromycin: PD, pharmacology
neplanocin A: PD, pharmacology
1,1' [1,4 phenylenebis(methylene)]bis(1,4,8,11 tetraazacyclotetradecane): DT, drug therapy
1,1' [1,4 phenylenebis(methylene)]bis(1,4,8,11 tetraazacyclotetradecane): PD, pharmacology
unindexed drug
unclassified drug

RN (suramin) 129-46-4, 145-63-1; (5 (2 bromovinyl) 2' deoxyuridine) 69304-47-8, 82768-44-3; (aciclovir) 59277-89-3; (9 (2,3 dihydroxypropyl)adenine) 716-17-6; (ribavirin) 36791-04-5; (polyacrylic acid) 74350-43-9, 87003-46-1, 9003-01-4, 9003-04-7; (polymethacrylic acid) 25087-26-7; (dextran sulfate) 9011-18-1, 9042-14-2; (3 deazaaristeromycin) **58316-88-4**; (neplanocin A) 72877-50-0; (1,1' [1,4 ~~phenylenebis~~(methylene)]bis(1,4,8,11 tetraazacyclotetradecane)) 155148-31-5

CN Amd 3100

L27 ANSWER 5 OF 6 EMBASE COPYRIGHT 2004 ELSEVIER INC. ALL RIGHTS RESERVED. on STN

ACCESSION NUMBER: 2000389718 EMBASE
TITLE: Pentacyclic compounds useful as inhibitors of hepatitis C virus NS3 helicase.
SOURCE: Expert Opinion on Therapeutic Patents, (2000) 10/11 (1777-1779).
Refs: 5
ISSN: 1354-3776 CODEN: EOTPEG
COUNTRY: United Kingdom
DOCUMENT TYPE: Journal; Article
FILE SEGMENT: 004 Microbiology
030 Pharmacology
037 Drug Literature Index
039 Pharmacy
048 Gastroenterology
LANGUAGE: English
SUMMARY LANGUAGE: English

cpd is wrong

AB A series of 2,3,5-trisubstituted-1,2,4-thiadiazol-2-ium salts is reported by Vertex Pharmaceuticals to possess inhibitory properties against NS3, a multifunctional (serine protease and NTPase/helicase) protein of hepatitis C virus (HCV), the causative agent of non-A, non-B hepatitis. These compounds were prepared by simple synthetic procedures and assayed in vitro for their inhibitory properties of different enzymatic activity of NS3, such as the unwinding assay, the spectrophotometric ATPase assay, as well as the HPLC ATPase activity assay. Some of them showed in vitro inhibitory activity in the low micromolar range, making them interesting leads for the development of more efficient HCV helicase inhibitors. No in vivo data are presented.

CT Medical Descriptors:
***Hepatitis C virus**
hepatitis non A non B

hepatitis C
drug synthesis
patent
drug mechanism
antiviral activity
enzyme inhibition
enzyme activity
virus replication
virus inhibition
DNA denaturation
enzyme assay
high performance liquid chromatography
concentration response
drug efficacy
spectrophotometry
reversed phase high performance liquid chromatography
proton nuclear magnetic resonance
nonhuman
article
Drug Descriptors:
*helicase: EC, endogenous compound
*antivirus agent: AN, drug analysis
*antivirus agent: DV, drug development
*antivirus agent: PR, pharmaceutics
*antivirus agent: PD, pharmacology
virus enzyme: EC, endogenous compound
enzyme inhibitor: AN, drug analysis
enzyme inhibitor: DV, drug development
enzyme inhibitor: PR, pharmaceutics
enzyme inhibitor: PD, pharmacology
1,2,4 thiadiazol 2 ium salt derivative: AN, drug analysis
1,2,4 thiadiazol 2 ium salt derivative: DV, drug development
1,2,4 thiadiazol 2 ium salt derivative: PR, pharmaceutics
1,2,4 thiadiazol 2 ium salt derivative: PD, pharmacology
2,3,5 triphenyl 1,2,4 thiadiazol 2 ium salt derivative: AN, drug analysis
2,3,5 triphenyl 1,2,4 thiadiazol 2 ium salt derivative: DV, drug development
2,3,5 triphenyl 1,2,4 thiadiazol 2 ium salt derivative: PR, pharmaceutics
2,3,5 triphenyl 1,2,4 thiadiazol 2 ium salt derivative: PD, pharmacology
2,3,5 trinaphthyl 1,2,4 thiadiazol 2 ium salt derivative: AN, drug analysis
2,3,5 trinaphthyl 1,2,4 thiadiazol 2 ium salt derivative: DV, drug development
2,3,5 trinaphthyl 1,2,4 thiadiazol 2 ium salt derivative: PR, pharmaceutics
2,3,5 trinaphthyl 1,2,4 thiadiazol 2 ium salt derivative: PD, pharmacology
thiadiazole derivative: AN, drug analysis
thiadiazole derivative: DV, drug development
thiadiazole derivative: PR, pharmaceutics
thiadiazole derivative: PD, pharmacology
1 amino 2 thio 3,4,5 triazole sodium thiocyanate: AN, drug analysis
1 amino 2 thio 3,4,5 triazole sodium thiocyanate: DV, drug development
1 amino 2 thio 3,4,5 triazole sodium thiocyanate: PR, pharmaceutics
1 amino 2 thio 3,4,5 triazole sodium thiocyanate: PD, pharmacology
virus DNA: EC, endogenous compound
virus RNA: EC, endogenous compound
adenosine triphosphate: EC, endogenous compound

nicotinamide adenine dinucleotide: EC, endogenous compound
reduced nicotinamide adenine dinucleotide: EC, endogenous compound
adenosine diphosphate: EC, endogenous compound
triethylamine
virus protein: EC, endogenous compound
envelope protein: EC, endogenous compound
hepatitis vaccine
serine proteinase: EC, endogenous compound
deoxycytidine kinase: EC, endogenous compound
chymotrypsin: EC, endogenous compound
proton
double stranded DNA: EC, endogenous compound
single stranded DNA: EC, endogenous compound
unclassified drug

RN (helicase) 42613-29-6; (adenosine triphosphate) 15237-44-2, 56-65-5, 987-65-5; (nicotinamide adenine dinucleotide) **53-84-9**; (reduced nicotinamide adenine dinucleotide) **58-68-4**; (adenosine diphosphate) 20398-34-9, 58-64-0; (triethylamine) 121-44-8; (serine proteinase) 37259-58-8; (deoxycytidine kinase) 9039-45-6; (chymotrypsin) 9004-07-3, 9014-64-6; (proton) 12408-02-5, 12586-59-3

CO Vertex; Viropharma; Phenomenex

L27 ANSWER 6 OF 6 EMBASE COPYRIGHT 2004 ELSEVIER INC. ALL RIGHTS RESERVED. on STN

ACCESSION NUMBER: 1998250650 EMBASE

TITLE: Alcoholic liver disease: New aspects of studies.

AUTHOR: Tsutsumi M.; Takase S.

CORPORATE SOURCE: M. Tsutsumi, Division of Gastroenterology, Department of Internal Medicine, Kanazawa Medical University, Uchinada, Ishikawa 920-0293, Japan

SOURCE: Japanese Journal of Alcohol Studies and Drug Dependence, (1998) 33/3 (171-180).
Refs: 32
ISSN: 1341-8963 CODEN: AKYIDF

COUNTRY: Japan

DOCUMENT TYPE: Journal; General Review

FILE SEGMENT: 040 Drug Dependence, Alcohol Abuse and Alcoholism
048 Gastroenterology

LANGUAGE: Japanese

SUMMARY LANGUAGE: English; Japanese

AB Although many factors related to the pathogenesis of alcoholic liver disease have been considered, 1) hepatotoxic effects of ethanol and its metabolites, 2) effects of excessive hepatic NADH generation, 3) hypoxia, 4) alterations of the immune system, 5) genetic factors, and 6) nutritional factors may play more important roles to produce alcoholic liver disease. Recently, genetic polymorphism of key enzymes related to metabolism of ethanol and acetaldehyde, alcohol dehydrogenase, cytochrome P4502E1 and aldehyde dehydrogenase, have been discovered. On the other hand, an assay system for hepatitis C virus (HCV) markers has been developed and a high frequency of HCV markers in alcoholics with liver disease has been reported. In this review, we focus on recent gains in our knowledge of pathogenesis of alcoholic liver disease, and discuss the relationship between alcoholic liver disease and HCV, and treatment of alcoholic liver disease.

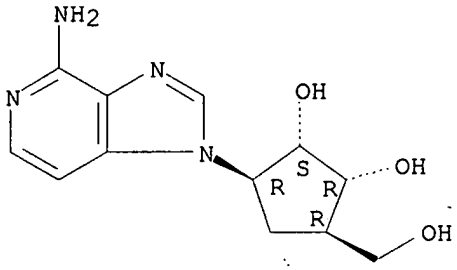
CT Medical Descriptors:
*alcohol liver disease: DI, diagnosis
risk factor

pathogenesis
liver toxicity
genetic polymorphism
enzyme metabolism
hepatitis c virus
genetics
human
review
Drug Descriptors:
acetaldehyde: EC, endogenous compound
alcohol dehydrogenase: EC, endogenous compound
reduced nicotinamide adenine dinucleotide: EC, endogenous compound
cytochrome p450: EC, endogenous compound
RN (acetaldehyde) 75-07-0; (alcohol dehydrogenase) 9031-72-5; (reduced nicotinamide adenine dinucleotide) **58-68-4**; (cytochrome p450) 9035-51-2

Cmpd. associated with answers 1,3,4

L1 ANSWER 1 OF 1 REGISTRY COPYRIGHT 2004 ACS on STN
RN 58316-88-4 REGISTRY
CN 1,2-Cyclopentanediol, 3-(4-amino-1H-imidazo[4,5-c]pyridin-1-yl)-5-(hydroxymethyl)-, (1R,2S,3R,5R)- (9CI) (CA INDEX NAME)
OTHER CA INDEX NAMES:
CN 1,2-Cyclopentanediol, 3-(4-amino-1H-imidazo[4,5-c]pyridin-1-yl)-5-(hydroxymethyl)-, [1R-(1α,2α,3β,5β)]-
CN 1H-Imidazo[4,5-c]pyridine, 1,2-cyclopentanediol deriv.
OTHER NAMES:
CN 3-Deazaaristeromycin
FS STEREOSEARCH
MF C12 H16 N4 O3
LC STN Files: BEILSTEIN*, BIOSIS, BIOTECHNO, CA, CANCERLIT, CAPLUS, CASREACT, DDFU, DRUGU, EMBASE, MEDLINE, RTECS*, TOXCENTER, USPATFULL
(*File contains numerically searchable property data)
DT.CA CAplus document type: Conference; Journal; Patent; Report
RL.P Roles from patents: BIOL (Biological study); PREP (Preparation); RACT (Reactant or reagent); USES (Uses)
RLD.P Roles for non-specific derivatives from patents: BIOL (Biological study); PREP (Preparation)
RL.NP Roles from non-patents: BIOL (Biological study); PREP (Preparation); PROC (Process); PRP (Properties); USES (Uses)
RLD.NP Roles for non-specific derivatives from non-patents: BIOL (Biological study); PREP (Preparation); USES (Uses)

Absolute stereochemistry.



an Imidazolo pyridine

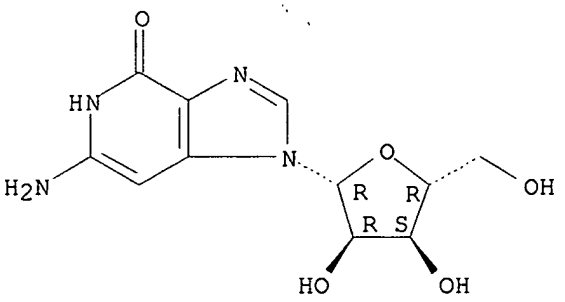
PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

54 REFERENCES IN FILE CA (1907 TO DATE)
3 REFERENCES TO NON-SPECIFIC DERIVATIVES IN FILE CA
54 REFERENCES IN FILE CAPLUS (1907 TO DATE)

Cmpd. assoc. w/ Ref # 2

L2 ANSWER 1 OF 1 REGISTRY COPYRIGHT 2004 ACS on STN
RN 56039-11-3 REGISTRY
CN 4H-Imidazo[4,5-c]pyridin-4-one, 6-amino-1,5-dihydro-1-β-D-ribofuranosyl- (9CI) (CA INDEX NAME)
OTHER NAMES:
CN 3-Deazaguanosine
CN 7-Ribosyl-3-deazaguanine
CN ICN 4793
FS STEREOSEARCH
DR 119618-65-4
MF C11 H14 N4 O5
LC STN Files: BEILSTEIN*, BIOBUSINESS, BIOSIS, BIOTECHNO, CA, CANCERLIT, CAPLUS, CASREACT, CHEMINFORMRX, DDFU, DRUGU, EMBASE, IFICDB, IFIPAT, IFIUDB, MEDLINE, MSDS-OHS, PHAR, TOXCENTER, USPATFULL
(*File contains numerically searchable property data)
DT.CA CAplus document type: Journal; Patent
RL.P Roles from patents: BIOL (Biological study); PREP (Preparation); PROC (Process); RACT (Reactant or reagent); USES (Uses)
RLD.P Roles for non-specific derivatives from patents: BIOL (Biological study); PREP (Preparation)
RL.NP Roles from non-patents: ANST (Analytical study); BIOL (Biological study); PREP (Preparation); PROC (Process); PRP (Properties); RACT (Reactant or reagent); USES (Uses)

Absolute stereochemistry.



an imidazolopyridine

PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

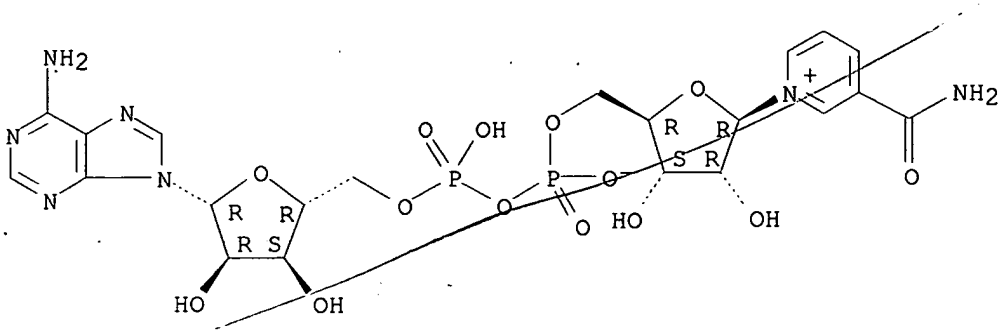
55 REFERENCES IN FILE CA (1907 TO DATE)
2 REFERENCES TO NON-SPECIFIC DERIVATIVES IN FILE CA
55 REFERENCES IN FILE CAPLUS (1907 TO DATE)

cmpd. associd w/ Ref #5

L3 ANSWER 1 OF 1 REGISTRY COPYRIGHT 2004 ACS on STN
RN **53-84-9** REGISTRY
CN Adenosine 5'-(trihydrogen diphosphate), P'→5'-ester with 3-(aminocarbonyl)-1-β-D-ribofuranosylpyridinium, inner salt (9CI) (CA INDEX NAME)
OTHER CA INDEX NAMES:
CN Adenosine 5'-(trihydrogen diphosphate), P'→5'-ester with 3-(aminocarbonyl)-1-β-D-ribofuranosylpyridinium hydroxide, inner salt
CN Pyridinium, 3-carbamoyl-1-β-D-ribofuranosyl-, hydroxide, 5'→5'-ester with adenosine 5'-(trihydrogen pyrophosphate), inner salt (8CI)
OTHER NAMES:
CN β-Diphosphopyridine nucleotide
CN β-NAD
CN β-NAD+
CN β-Nicotinamide adenine dinucleotide
CN Adenine-nicotinamide dinucleotide
CN CO-I
CN Codehydrase I
CN Codehydrogenase I
CN Coenzyme I
CN Cozymase I
CN Diphosphopyridine nucleotide
CN DPN
CN Enzopride
CN NAD
CN NAD+
CN Nadide
CN Nicotinamide-adenine dinucleotide
CN NSC 20272
CN Oxidized diphosphopyridine nucleotide
FS STEREOSEARCH
DR 30429-30-2, 159929-29-0
MF C21 H27 N7 O14 P2
CI COM
LC STN Files: ADISNEWS, AGRICOLA, ANABSTR, BEILSTEIN*, BIOBUSINESS, BIOSIS, BIOTECHNO, CA, CABA, CANCERLIT, CAOLD, CAPLUS, CASREACT, CBNB, CEN, CHEMCATS, CHEMLIST, CIN, CSCHEM, DDFU, DIOGENES, DRUGU, EMBASE, IFICDB, IFIPAT, IFIUDB, IPA, MEDLINE, MRCK*, MSDS-OHS, NAPRALERT, NIOSHTIC, PIRA, PROMT, RTECS*, TOXCENTER, USAN, USPAT2, USPATFULL
(*File contains numerically searchable property data)
Other Sources: DSL**, EINECS**, TSCA**, WHO
(**Enter CHEMLIST File for up-to-date regulatory information)
DT.CA CAplus document type: Book; Conference; Dissertation; Journal; Patent; Report
RL.P Roles from patents: ANST (Analytical study); BIOL (Biological study); FORM (Formation, nonpreparative); OCCU (Occurrence); PREP (Preparation); PROC (Process); PRP (Properties); RACT (Reactant or reagent); USES (Uses); NORL (No role in record)
RLD.P Roles for non-specific derivatives from patents: ANST (Analytical study); BIOL (Biological study); FORM (Formation, nonpreparative); PREP (Preparation); PROC (Process); PRP (Properties); RACT (Reactant or reagent); USES (Uses)
RL.NP Roles from non-patents: ANST (Analytical study); BIOL (Biological study); FORM (Formation, nonpreparative); MSC (Miscellaneous); OCCU (Occurrence); PREP (Preparation); PROC (Process); PRP (Properties); RACT

(Reactant or reagent); USES (Uses); NORL (No role in record)
RLD.NP Roles for non-specific derivatives from non-patents: ANST (Analytical study); BIOL (Biological study); FORM (Formation, nonpreparative); MSC (Miscellaneous); OCCU (Occurrence); PREP (Preparation); PROC (Process); PRP (Properties); RACT (Reactant or reagent); USES (Uses)

Absolute stereochemistry.



13778 REFERENCES IN FILE CA (1907 TO DATE)
500 REFERENCES TO NON-SPECIFIC DERIVATIVES IN FILE CA
13792 REFERENCES IN FILE CAPLUS (1907 TO DATE)
129 REFERENCES IN FILE CAOLD (PRIOR TO 1967)

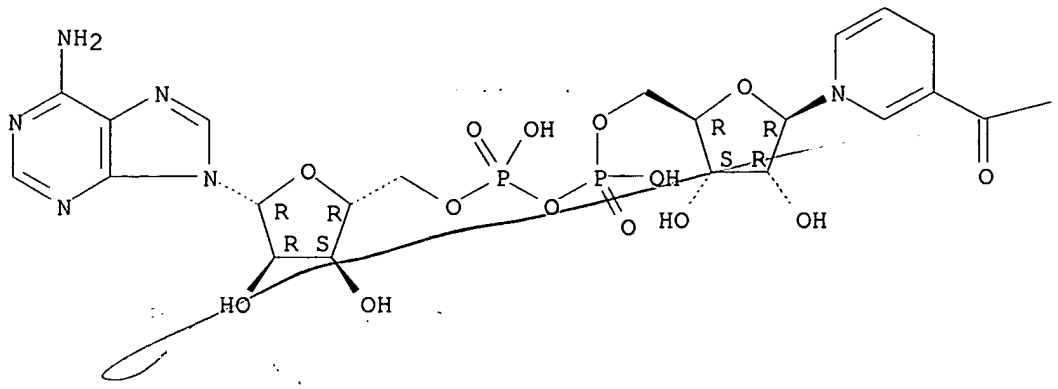
compd assoc'd w/ Ref #5+6

L4 ANSWER 1 OF 1 REGISTRY COPYRIGHT 2004 ACS on STN
RN **58-68-4** REGISTRY
CN Adenosine 5'-(trihydrogen diphosphate), P'→5'-ester with 1,4-dihydro-1-β-D-ribofuranosyl-3-pyridinecarboxamide (9CI) (CA INDEX NAME)
OTHER CA INDEX NAMES:
CN Adenosine 5'-(trihydrogen pyrophosphate), 5'→5'-ester with 1,4-dihydro-1-β-D-ribofuranosylnicotinamide (8CI)
CN Adenosine pyrophosphate, 5'→5'-ester with 1,4-dihydro-1-β-D-ribofuranosylnicotinamide (7CI)
OTHER NAMES:
CN β-DPNH
CN β-NADH
CN 1,4-Dihydronicotinamide adenine dinucleotide
CN Codehydrase I, reduced
CN Codehydrogenase I, reduced
CN Coenzyme I, reduced
CN Cozymase I, reduced
CN Dihydrocodehydrogenase I
CN Dihydrocozymase
CN Dihydronicotinamide adenine dinucleotide
CN Dihydronicotinamide mononucleotide
CN DPNH
CN NADH
CN NADH2
CN Nicotinamide-adenine dinucleotide, reduced
CN Reduced codehydrogenase I
CN Reduced diphosphopyridine nucleotide
CN Reduced nicotinamide adenine diphosphate
CN Reduced nicotinamide-adenine dinucleotide
FS STEREOSEARCH
DR 443892-10-2
MF C21 H29 N7 O14 P2
CI COM
LC STN Files: ADISNEWS, AGRICOLA, ANABSTR, BEILSTEIN*, BIOBUSINESS, BIOSIS, BIOTECHNO, CA, CABA, CAOLD, CAPLUS, CASREACT, CEN, CHEMCATS, CHEMLIST, CIN, CSCHEM, DDFU, DRUGU, EMBASE, GMELIN*, IFICDB, IFIPAT, IFIUDB, MRCK*, NIOSHTIC, PROMT, TOXCENTER, USPAT2, USPATFULL
(*File contains numerically searchable property data)
Other Sources: DSL**, EINECS**, TSCA**
(**Enter CHEMLIST File for up-to-date regulatory information)
DT.CA CAplus document type: Book; Conference; Dissertation; Journal; Patent; Report
RL.P Roles from patents: ANST (Analytical study); BIOL (Biological study); FORM (Formation, nonpreparative); MSC (Miscellaneous); OCCU (Occurrence); PREP (Preparation); PROC (Process); PRP (Properties); RACT (Reactant or reagent); USES (Uses)
RLD.P Roles for non-specific derivatives from patents: ANST (Analytical study); BIOL (Biological study); PREP (Preparation); PROC (Process); PRP (Properties); USES (Uses)
RL.NP Roles from non-patents: ANST (Analytical study); BIOL (Biological study); FORM (Formation, nonpreparative); MSC (Miscellaneous); OCCU (Occurrence); PREP (Preparation); PROC (Process); PRP (Properties); RACT (Reactant or reagent); USES (Uses); NORL (No role in record)
RLD.NP Roles for non-specific derivatives from non-patents: ANST (Analytical study); BIOL (Biological study); FORM (Formation, nonpreparative); OCCU

(Occurrence); PREP (Preparation); PROC (Process); PRP (Properties); RACT (Reactant or reagent); USES (Uses)

Absolute stereochemistry.

PAGE 1-A



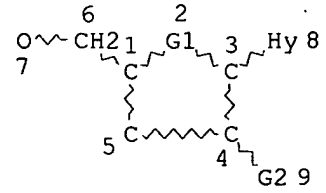
PAGE 1-B

—NH2

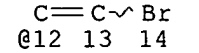
PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

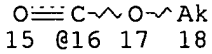
12790 REFERENCES IN FILE CA (1907 TO DATE)
241 REFERENCES TO NON-SPECIFIC DERIVATIVES IN FILE CA
12810 REFERENCES IN FILE CAPLUS (1907 TO DATE)
1 REFERENCES IN FILE CAOLD (PRIOR TO 1967)

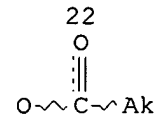
```
=> d que
L1   (    397655)SEA FILE=REGISTRY ABB=ON  PLU=ON  NC5/ESS AND (N2C3 OR NCNC2
               OR N3C2 OR N2CNC)/ESS
L2   (     26241)SEA FILE=REGISTRY ABB=ON  PLU=ON  L1 AND (OC4 OR C5 OR SC4)/ES

L3                STR
```

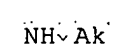


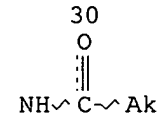
S @10 Ak @11

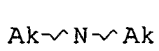


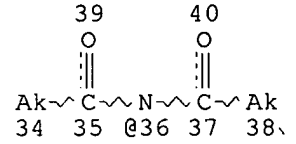


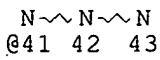













```
VAR G1=O/10/SO2/CH2
VAR G2=OH/11/41/CN/12/16/19/23/X/NO2/NH2/25/27/32/36
NODE ATTRIBUTES:
CONNECT IS E2  RC AT  10
CONNECT IS E1  RC AT  11
CONNECT IS E1  RC AT  18
CONNECT IS E1  RC AT  21
CONNECT IS E1  RC AT  24
CONNECT IS E1  RC AT  26
CONNECT IS E1  RC AT  29
CONNECT IS E1  RC AT  31
CONNECT IS E1  RC AT  33
CONNECT IS E1  RC AT  34
CONNECT IS E1  RC AT  38
DEFAULT MLEVEL IS ATOM
GGCAT   IS PCY  UNS  AT   8
DEFAULT ECLEVEL IS LIMITED
ECOUNT  IS M2 N  AT   8

GRAPH ATTRIBUTES:
RSPEC   4
NUMBER OF NODES IS  43

STEREO ATTRIBUTES: NONE
L4          3150 SEA FILE=REGISTRY SUB=L2 SSS FUL L3
L20         1077 SEA FILE=HCAPLUS ABB=ON  PLU=ON  L4(L)(BAC OR DMA OR PAC OR
                 PKT OR THU)/RL
L22         3438 SEA FILE=HCAPLUS ABB=ON  PLU=ON  FLAVIVIRUS+OLD,NT/CT OR
```

FLAVIVIR?
L23 1 SEA FILE=HCAPLUS ABB=ON PLU=ON L20 AND L22

=> d l23 ibib abs hitind hitstr

L23 ANSWER 1 OF 1 HCAPLUS COPYRIGHT 2004 ACS on STN
ACCESSION NUMBER: 2002:458415 HCAPLUS
DOCUMENT NUMBER: 138:100377
TITLE: Identification of active antiviral compounds against a New York isolate of West Nile virus
AUTHOR(S): Morrey, John D.; Smee, Donald F.; Sidwell, Robert W.; Tseng, Christopher
CORPORATE SOURCE: Department of Animal, Dairy, and Veterinary Sciences, Institute for Antiviral Research, Utah State University, Logan, UT, 84322-4700, USA
SOURCE: Antiviral Research (2002), 55(1), 107-116
CODEN: ARSRDR; ISSN: 0166-3542
PUBLISHER: Elsevier Science B.V.
DOCUMENT TYPE: Journal
LANGUAGE: English

AB The recent West Nile virus (WNV) outbreak in the United States has increased the need to identify effective therapies for this disease. A chemotherapeutic approach may be a reasonable strategy because the virus infection is typically not chronic and antiviral drugs have been identified to be effective in vitro against other **flaviviruses**. A panel of 34 substances was tested against infection of a recent New York isolate of WNV in Vero cells and active compds. were also evaluated in MA-104 cells. Some of these compds. were also evaluated in Vero cells against the 1937 Uganda isolate of the WNV. Six compds. were identified to be effective against virus-induced CPE with 50% effective concns. (EC50) less than 10 μg/mL and with a selectivity index (SI) of greater than 10. Known inhibitors of orotidine monophosphate decarboxylase and inosine monophosphate dehydrogenase involved in the synthesis of GTP, UTP, and TTP were most effective. The compds. 6-azauridine, 6-azauridine triacetate, cyclopententylcytosine (CPE-C), mycophenolic acid and pyrazofurin appeared to have the greatest activities against the New York isolate, followed by 2-thio-6-azauridine. Anti-WNV activity of 6-azauridine was confirmed by virus yield reduction assay when the assay was performed 2 days after initial infection in Vero cells. The neutral red assay mean EC50 of ribavirin was only 106 μg/mL with a mean SI of 9.4 against the New York isolate and only slightly more effective against the Uganda isolate. There were some differences in the drug sensitivities of the New York and Uganda isolates, but when comparisons were made by categorizing drugs according to their modes of action, similarities of activities between the two isolates were identified.

CC 1-5 (Pharmacology)
IT Antiviral agents
West Nile virus
(identification of active antiviral compds. against a New York isolate of West Nile virus)
IT 54-25-1, 6-Azauridine 141-90-2, 2-Thiouracil 145-63-1, Suramin 316-46-1, 5-Fluorouridine 320-67-2, 5-Azacytidine 548-04-9, Hypericin 2169-64-4, 6-Azauridine triacetate 13877-76-4, Formycin B 20201-55-2, 6-Bromotoyocamycin 24280-93-1, Mycophenolic acid 27089-56-1, 2-Thio-6-azauridine 30868-30-5, Pyrazofurin 36791-04-5, Ribavirin 42400-25-9 54262-83-8, (S)-9-(2,3-Dihydroxypropyl)adenine

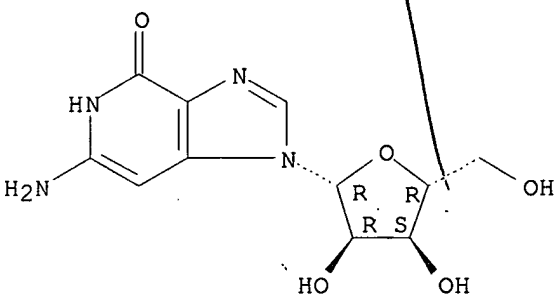
56039-11-3, 3-Deazaguanosine 60084-10-8, Tiazofurin 62488-57-7
83705-13-9, Selenazofurin 90597-20-9 90597-22-1, Cyclopentenylcytosine
102052-95-9, 3-Deazaneplanocin A 102977-57-1 119567-79-2, Ribamidine
RL: **PAC (Pharmacological activity)**; **THU (Therapeutic use)**; BIOL (Biological study); USES (Uses)
(identification of active antiviral compds. against a New York isolate of West Nile virus)

IT **56039-11-3**, 3-Deazaguanosine
RL: **PAC (Pharmacological activity)**; **THU (Therapeutic use)**; BIOL (Biological study); USES (Uses)
(identification of active antiviral compds. against a New York isolate of West Nile virus)

RN 56039-11-3 HCAPLUS

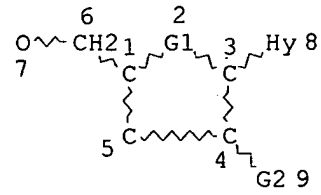
CN 4H-Imidazo[4,5-c]pyridin-4-one, 6-amino-1,5-dihydro-1-β-D-ribofuranosyl- (9CI) (CA INDEX NAME)

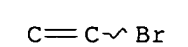
Absolute stereochemistry.

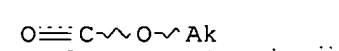


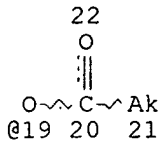
REFERENCE COUNT: 37 THERE ARE 37 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

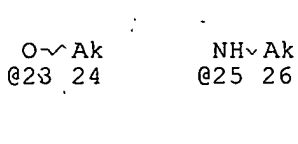
```
=> d que
L1   (    397655)SEA FILE=REGISTRY ABB=ON  PLU=ON  NC5/ESS AND (N2C3 OR NCNC2
                 OR N3C2 OR N2CNC)/ESS
L2   (     26241)SEA FILE=REGISTRY ABB=ON  PLU=ON  L1 AND (OC4 OR C5 OR SC4)/ES

L3               STR
```

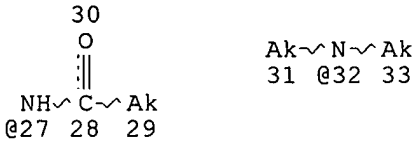


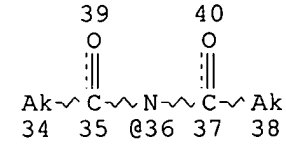


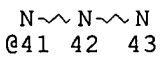













```
VAR G1=O/10/SO2/CH2
VAR G2=OH/11/41/CN/12/16/19/23/X/NO2/NH2/25/27/32/36
NODE ATTRIBUTES:
CONNECT IS E2  RC AT  10
CONNECT IS E1  RC AT  11
CONNECT IS E1  RC AT  18
CONNECT IS E1  RC AT  21
CONNECT IS E1  RC AT  24
CONNECT IS E1  RC AT  26
CONNECT IS E1  RC AT  29
CONNECT IS E1  RC AT  31
CONNECT IS E1  RC AT  33
CONNECT IS E1  RC AT  34
CONNECT IS E1  RC AT  38
DEFAULT MLEVEL IS ATOM
GGCAT   IS PCY  UNS  AT   8
DEFAULT ECLEVEL IS LIMITED
ECOUNT  IS M2 N  AT   8

GRAPH ATTRIBUTES:
RSPEC   4
NUMBER OF NODES IS  43

STEREO ATTRIBUTES: NONE
L4          3150 SEA FILE=REGISTRY SUB=L2 SSS FUL L3
L28            1 SEA FILE=USPATFULL ABB=ON  PLU=ON  L4 AND FLAVIVIR?
```

=> d bib abs

L28 ANSWER 1 OF 1 USPATFULL on STN
AN 2004:1847 USPATFULL
TI Attenuated mycobacterium tuberculosis vaccines
IN Jacobs, William R., Pelham, NY, UNITED STATES
Hsu, Tsungda, Bronx, NY, UNITED STATES
Bardarov, Stoyan, Bronx, NY, UNITED STATES
Sambandamurthy, Vasan, Worcester, MA, UNITED STATES LR
PI US 2004001866 A1 20040101
AI US 2003-351452 A1 20030124 (10)
PRAI US 2002-358152P 20020219 (60)
DT Utility
FS APPLICATION
LREP Elie H. Gendloff, Craig J. Arnold, Alan D. Miller, Amster, Rothstein & Ebenstein, 90 Park Avenue, New York, NY, 10016
CLMN Number of Claims: 125
ECL Exemplary Claim: 1
DRWN 22 Drawing Page(s)
LN.CNT 3313
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
AB Non-naturally occurring mycobacteria in the Mycobacterium tuberculosis complex are provided. These mycobacteria have a deletion of an RD1 region or a region controlling production of a vitamin, and exhibit attenuated virulence in a mammal when compared to the mycobacteria without the deletion. Also provided are non-naturally occurring mycobacteria that have a deletion of a region controlling production of lysine, and mycobacteria comprising two attenuating deletions. Vaccines comprising these mycobacteria are also provided, as are methods of protecting mammals from virulent mycobacteria using the vaccines. Also provided are methods of preparing these vaccines which include the step of deleting an RD1 region or a region controlling production of a vitamin from a mycobacterium in the M. tuberculosis complex.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

=> d ind

L28 ANSWER 1 OF 1 USPATFULL on STN
INCL INCLM: 424/248.100
INCLS: 435/252.300
NCL NCLM: 424/248.100
NCLS: 435/252.300
IC [7]
ICM: A61K039-04
ICS: C12N001-21

CHEMICAL ABSTRACTS INDEXING COPYRIGHT 2004 ACS on STN

	PATENT	KIND	DATE
OS CA 139:212868 *	WO 03070164	A2	20030828

* CA Indexing for this record included
CC 15-2 (Immunochemistry)
Section cross-reference(s): 3, 63
ST Mycobacterium tuberculosis vitamin pantothenic acid NAD RD1 region

deletion; antigen vaccine Mycobacterium tuberculosis RD1 deletion

IT Borrelia
Cattle
DNA sequences
Genetic engineering
Genetic markers
Herpesviridae
Human
Human immunodeficiency virus
Human poliovirus
Immunodeficiency
Immunostimulants
Infection
Leishmania
Mammalia
Measles virus
Molecular cloning
Mouse
Mumps virus
Mycobacterium BCG
Mycobacterium africanum
Mycobacterium avium
Mycobacterium bovis
Mycobacterium intracellulare
Mycobacterium leprae
Mycobacterium tuberculosis
Neisseria
Pertussis
Rabies
Recombination, genetic
Salmonella
Shigella
Transduction, genetic
Treponema
Vaccines
Vibrio cholerae
(attenuated Mycobacterium tuberculosis comprising deletion of RD1 region for vaccine prepns.)

IT Vitamins
(attenuated Mycobacterium tuberculosis comprising deletion of RD1 region for vaccine prepns.)

IT Antigens
(attenuated Mycobacterium tuberculosis comprising deletion of RD1 region for vaccine prepns.)

IT Enzymes, biological studies
(attenuated Mycobacterium tuberculosis comprising deletion of RD1 region for vaccine prepns.)

IT Interleukin 1
(attenuated Mycobacterium tuberculosis comprising deletion of RD1 region for vaccine prepns.)

IT Interleukin 2
(attenuated Mycobacterium tuberculosis comprising deletion of RD1 region for vaccine prepns.)

IT Interleukin 3
(attenuated Mycobacterium tuberculosis comprising deletion of RD1 region for vaccine prepns.)

IT Interleukin 4

(attenuated Mycobacterium tuberculosis comprising deletion of RD1 region for vaccine prepns.)
IT Interleukin 5
(attenuated Mycobacterium tuberculosis comprising deletion of RD1 region for vaccine prepns.)
IT Interleukin 6
(attenuated Mycobacterium tuberculosis comprising deletion of RD1 region for vaccine prepns.)
IT Interleukin 7
(attenuated Mycobacterium tuberculosis comprising deletion of RD1 region for vaccine prepns.)
IT Lymphokines
(attenuated Mycobacterium tuberculosis comprising deletion of RD1 region for vaccine prepns.)
IT Lymphotoxin
(attenuated Mycobacterium tuberculosis comprising deletion of RD1 region for vaccine prepns.)
IT Reporter gene
(attenuated Mycobacterium tuberculosis comprising deletion of RD1 region for vaccine prepns.)
IT Tumor necrosis factors
(attenuated Mycobacterium tuberculosis comprising deletion of RD1 region for vaccine prepns.)
IT Microorganism
(auxotrophic; attenuated Mycobacterium tuberculosis comprising deletion of RD1 region for vaccine prepns.)
IT Development, mammalian postnatal
(child; attenuated Mycobacterium tuberculosis comprising deletion of RD1 region for vaccine prepns.)
IT Toxoids
(diphtheria; attenuated Mycobacterium tuberculosis comprising deletion of RD1 region for vaccine prepns.)
IT Steroids, biological studies
(enzyme; attenuated Mycobacterium tuberculosis comprising deletion of RD1 region for vaccine prepns.)
IT Drug delivery systems
(injections, s.c.; attenuated Mycobacterium tuberculosis comprising deletion of RD1 region for vaccine prepns.)
IT Venoms
(insect; attenuated Mycobacterium tuberculosis comprising deletion of RD1 region for vaccine prepns.)
IT Drug delivery systems
(intradermal; attenuated Mycobacterium tuberculosis comprising deletion of RD1 region for vaccine prepns.)
IT Development, microbial
(merozoite, malaria; attenuated Mycobacterium tuberculosis comprising deletion of RD1 region for vaccine prepns.)
IT DNA
(recombinant; attenuated Mycobacterium tuberculosis comprising deletion of RD1 region for vaccine prepns.)
IT Gene, microbial
(sacB; attenuated Mycobacterium tuberculosis comprising deletion of RD1 region for vaccine prepns.)
IT Mutagenesis
(site-directed, deletion; attenuated Mycobacterium tuberculosis comprising deletion of RD1 region for vaccine prepns.)
IT Venoms

(snake; attenuated Mycobacterium tuberculosis comprising deletion of RD1 region for vaccine prepns.)

IT Development, microbial
(sporozoite, malaria; attenuated Mycobacterium tuberculosis comprising deletion of RD1 region for vaccine prepns.)

IT Toxoids
(tetanus; attenuated Mycobacterium tuberculosis comprising deletion of RD1 region for vaccine prepns.)

IT Tuberculosis
(vaccine; attenuated Mycobacterium tuberculosis comprising deletion of RD1 region for vaccine prepns.)

IT Insecta
(venom; attenuated Mycobacterium tuberculosis comprising deletion of RD1 region for vaccine prepns.)

IT Interferons
(α; attenuated Mycobacterium tuberculosis comprising deletion of RD1 region for vaccine prepns.)

IT Interferons
(β; attenuated Mycobacterium tuberculosis comprising deletion of RD1 region for vaccine prepns.)

IT Interferons
(γ; attenuated Mycobacterium tuberculosis comprising deletion of RD1 region for vaccine prepns.)

IT **53-84-9**, Nicotinamide adenine dinucleotide 56-87-1, L-Lysine, biological studies 61-90-5, L-Leucine, biological studies 73-22-3, L-Tryptophan, biological studies 79-83-4, Pantothenic acid 147-85-3, L-Proline, biological studies
(attenuated Mycobacterium tuberculosis comprising deletion of RD1 region for vaccine prepns.)

IT 9001-45-0, β Glucuronidase 9014-00-0, Luciferase 9031-11-2, β Galactosidase 63774-46-9
(attenuated Mycobacterium tuberculosis comprising deletion of RD1 region for vaccine prepns.)

IT 588746-25-2P
(nucleotide sequence; attenuated Mycobacterium tuberculosis comprising deletion of RD1 region for vaccine prepns.)

IT 588746-26-3 588746-27-4 588746-28-5
(nucleotide sequence; attenuated Mycobacterium tuberculosis comprising deletion of RD1 region for vaccine prepns.)

IT 588747-89-1 588747-90-4 588747-91-5 588747-92-6 588747-93-7 588747-94-8 588747-95-9 588747-96-0
(unclaimed nucleotide sequence; attenuated Mycobacterium tuberculosis vaccines comprising deletion of RD1 region)

L15 ANSWER 1 OF 1 HCAPLUS COPYRIGHT 2004 ACS on STN
ACCESSION NUMBER: 2001:886155 HCAPLUS
DOCUMENT NUMBER: 136:590
ENTRY DATE: Entered STN: 07 Dec 2001
TITLE: Methods and compositions using modified nucleosides for treating **flaviviruses** and pestiviruses
INVENTOR(S): **Sommadossi, Jean-Pierre; Lacolla, Paolo**
PATENT ASSIGNEE(S): Novirio Pharmaceuticals Limited, Cayman I.; Universita Degli Studi Di Cagliari
SOURCE: PCT Int. Appl., 302 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
INT. PATENT CLASSIF.:
MAIN: C07H019-00
CLASSIFICATION: 1-5 (Pharmacology)
Section cross-reference(s): 63
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2001092282	A2	20011206	WO 2001-US16687	20010523
WO 2001092282	A3	20020502		
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM				
RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG				
EP 1294735	A2	20030326	EP 2001-952131	20010523
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR				
US 2003060400	A1	20030327	US 2001-863816	20010523
JP 2004510698	T2	20040408	JP 2002-500895	20010523
NO 2002005600	A	20030117	NO 2002-5600	20021121
US 2004063622	A1	20040401	US 2003-602693	20030620
US 2004097462	A1	20040520	US 2003-602692	20030620

PRIORITY APPLN. INFO.:
US 2000-207674P P 20000526
US 2001-283276P P 20010411
US 2001-863816 A3 20010523
WO 2001-US16687 W 20010523

OTHER SOURCE(S): MARPAT 136:590
ABSTRACT:
A method and composition are provided for treating a host infected with flavivirus or pestivirus, comprising administering an effective amount of a 1', 2' or 3'-modified nucleoside or a pharmaceutically acceptable salt or prodrug thereof.

SUPPL. TERM: flavivirus pestivirus antiviral nucleoside deriv
INDEX TERM: Drug delivery systems
(capsules; nucleoside derivs. for treating flaviviruses

and pestiviruses)

INDEX TERM: Toxicity
(drug; nucleoside derivs. for treating flaviviruses and pestiviruses)

INDEX TERM: Hematopoietic precursor cell
(erythroid burst-forming; nucleoside derivs. for treating flaviviruses and pestiviruses)

INDEX TERM: Hematopoietic precursor cell
(granulocyte-macrophage colony-forming; nucleoside derivs. for treating flaviviruses and pestiviruses)

INDEX TERM: Mitochondria
(mitochondrial toxicity; nucleoside derivs. for treating flaviviruses and pestiviruses)

INDEX TERM: Toxicity
(myelotoxicity; nucleoside derivs. for treating flaviviruses and pestiviruses)

INDEX TERM: Antiviral agents
Bovine diarrhea virus
Cytotoxicity
Drug bioavailability
Flavivirus
Pestivirus
(nucleoside derivs. for treating flaviviruses and pestiviruses)

INDEX TERM: Drug delivery systems
(tablets; nucleoside derivs. for treating flaviviruses and pestiviruses)

INDEX TERM: Bone marrow
(toxicity; nucleoside derivs. for treating flaviviruses and pestiviruses)

INDEX TERM: Drug delivery systems
(unit doses; nucleoside derivs. for treating flaviviruses and pestiviruses)

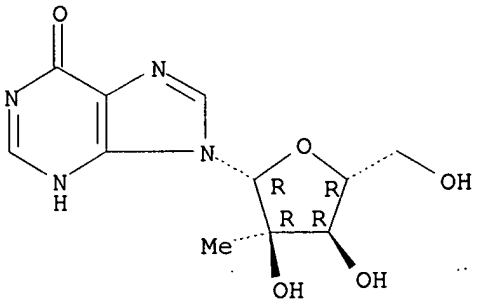
INDEX TERM: 15397-12-3 16848-12-7 20724-73-6 31448-54-1
69123-98-4, FIAU 119410-84-3 374750-30-8 374750-32-0
ROLE: ADV (Adverse effect, including toxicity); PAC (Pharmacological activity); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(nucleoside derivs. for treating flaviviruses and pestiviruses)

INDEX TERM: 125911-76-4 374750-27-3 374750-28-4 374750-29-5
ROLE: BSU (Biological study, unclassified); PKT (Pharmacokinetics); BIOL (Biological study)
(nucleoside derivs. for treating flaviviruses and pestiviruses)

INDEX TERM: 34441-68-4 38946-83-7 38946-84-8 54401-19-3
374750-31-9
ROLE: PAC (Pharmacological activity); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(nucleoside derivs. for treating flaviviruses and pestiviruses)

L16 ANSWER 1 OF 17 REGISTRY COPYRIGHT 2004 ACS on STN
RN **374750-32-0** REGISTRY
CN Inosine, 2'-C-methyl- (9CI) (CA INDEX NAME)
FS STEREOSEARCH
MF C11 H14 N4 O5
SR CA
LC STN Files: CA, CAPLUS, CASREACT, TOXCENTER, USPATFULL
DT.CA CAplus document type: Journal; Patent
RL.P Roles from patents: BIOL (Biological study); PREP (Preparation); USES (Uses)
RL.NP Roles from non-patents: PREP (Preparation); RACT (Reactant or reagent)

Absolute stereochemistry.

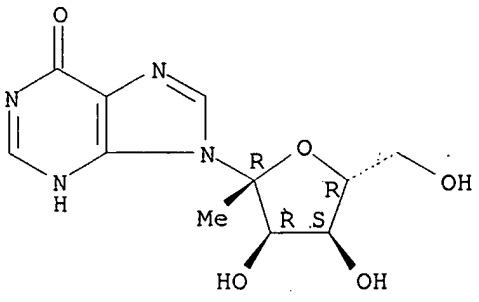


PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

5 REFERENCES IN FILE CA (1907 TO DATE)
5 REFERENCES IN FILE CAPLUS (1907 TO DATE)

L16 ANSWER 2 OF 17 REGISTRY COPYRIGHT 2004 ACS on STN
RN **374750-31-9** REGISTRY
CN Inosine, 1'-C-methyl- (9CI) (CA INDEX NAME)
FS STEREOSEARCH
MF C11 H14 N4 O5
SR CA
LC STN Files: CA, CAPLUS, TOXCENTER, USPATFULL
DT.CA CAplus document type: Patent
RL.P Roles from patents: BIOL (Biological study); PREP (Preparation); USES (Uses)

Absolute stereochemistry.

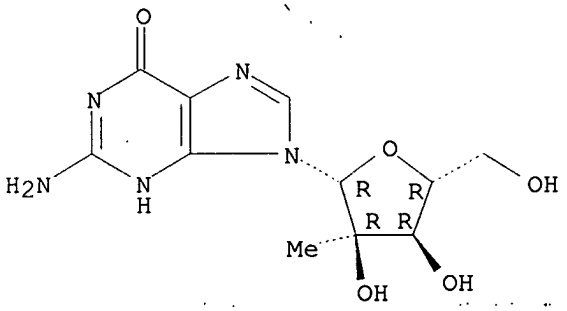


PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

2 REFERENCES IN FILE CA (1907 TO DATE)
2 REFERENCES IN FILE CAPLUS (1907 TO DATE)

L16 ANSWER 3 OF 17 REGISTRY COPYRIGHT 2004 ACS on STN
RN **374750-30-8** REGISTRY
CN Guanosine, 2'-C-methyl- (9CI) (CA INDEX NAME)
FS STEREOSEARCH
MF C11 H15 N5 O5
SR CA
LC STN Files: CA, CAPLUS, TOXCENTER, USPATFULL
DT.CA CAplus document type: Journal; Patent
RL.P Roles from patents: BIOL (Biological study); PREP (Preparation); USES (Uses)
RL.NP Roles from non-patents: BIOL (Biological study); USES (Uses)

Absolute stereochemistry.

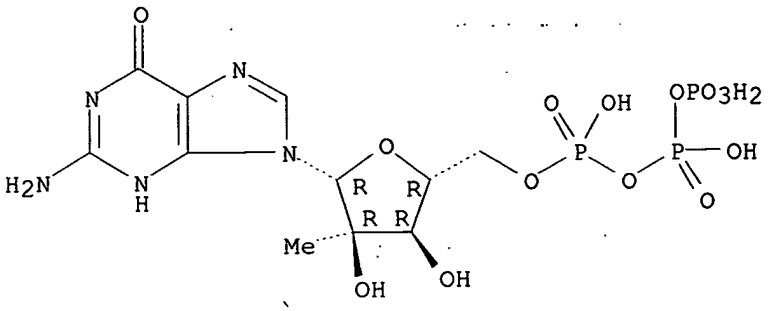


PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

4 REFERENCES IN FILE CA (1907 TO DATE)
4 REFERENCES IN FILE CAPLUS (1907 TO DATE)

L16 ANSWER 4 OF 17 REGISTRY COPYRIGHT 2004 ACS on STN
RN **374750-29-5** REGISTRY
CN Guanosine 5'-(tetrahydrogen triphosphate), 2'-C-methyl- (9CI) (CA INDEX NAME)
FS STEREOSEARCH
MF C11 H18 N5 O14 P3
SR CA
LC STN Files: CA, CAPLUS, TOXCENTER, USPATFULL
DT.CA CAplus document type: Patent
RL.P Roles from patents: BIOL (Biological study); PREP (Preparation); USES (Uses)

Absolute stereochemistry.

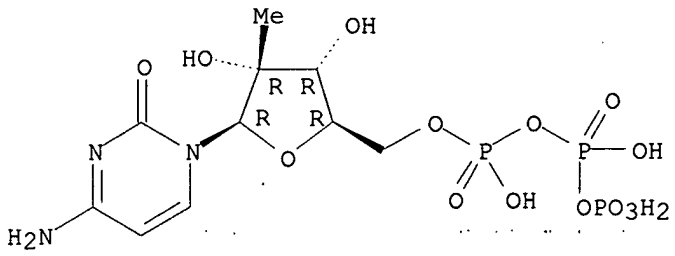


PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

2 REFERENCES IN FILE CA (1907 TO DATE)
2 REFERENCES IN FILE CAPLUS (1907 TO DATE)

L16 ANSWER 5 OF 17 REGISTRY COPYRIGHT 2004 ACS on STN
RN **374750-28-4** REGISTRY
CN Cytidine 5'-(tetrahydrogen triphosphate), 2'-C-methyl- (9CI) (CA INDEX NAME)
FS STEREOSEARCH
MF C10 H18 N3 O14 P3
SR CA
LC STN Files: CA, CAPLUS, TOXCENTER, USPATFULL
DT.CA CAplus document type: Patent
RL.P Roles from patents: BIOL (Biological study); PREP (Preparation); USES (Uses)

Absolute stereochemistry.



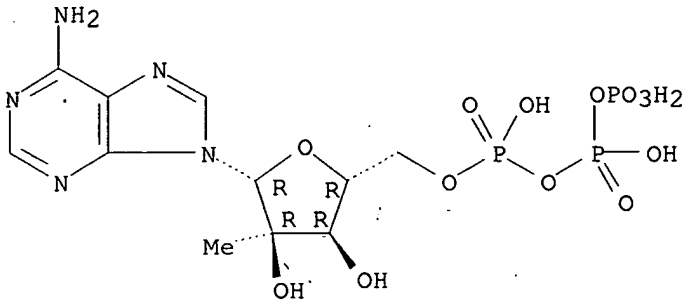
PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

4 REFERENCES IN FILE CA (1907 TO DATE)
4 REFERENCES IN FILE CAPLUS (1907 TO DATE)

L16 ANSWER 6 OF 17 REGISTRY COPYRIGHT 2004 ACS on STN
RN **374750-27-3** REGISTRY
CN Adenosine 5'-(tetrahydrogen triphosphate), 2'-C-methyl- (9CI) (CA INDEX NAME)
FS STEREOSEARCH
MF C11 H18 N5 O13 P3
SR CA

LC STN Files: CA, CAPLUS, TOXCENTER, USPATFULL
DT.CA CAplus document type: Journal; Patent
RL.P Roles from patents: BIOL (Biological study); PREP (Preparation); USES (Uses)
RL.NP Roles from non-patents: BIOL (Biological study); USES (Uses)

Absolute stereochemistry.

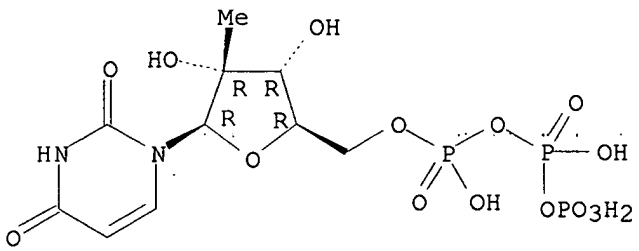


PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

4 REFERENCES IN FILE CA (1907 TO DATE)
4 REFERENCES IN FILE CAPLUS (1907 TO DATE)

L16 ANSWER 7 OF 17 REGISTRY COPYRIGHT 2004 ACS on STN
RN **125911-76-4** REGISTRY
CN Uridine 5'-(tetrahydrogen triphosphate), 2'-C-methyl- (9CI) (CA INDEX NAME)
FS STEREOSEARCH
MF C10 H17 N2 O15 P3
SR CA
LC STN Files: CA, CAPLUS, TOXCENTER, USPATFULL
DT.CA CAplus document type: Journal; Patent
RL.P Roles from patents: BIOL (Biological study); PREP (Preparation); USES (Uses)
RL.NP Roles from non-patents: BIOL (Biological study); PREP (Preparation); PROC (Process); PRP (Properties); RACT (Reactant or reagent)

Absolute stereochemistry.

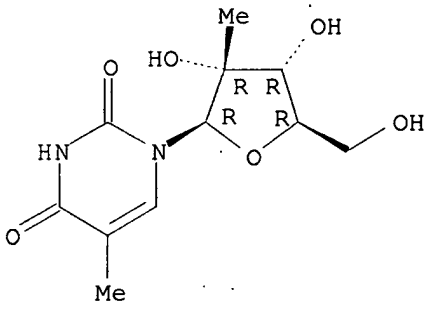


PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

7 REFERENCES IN FILE CA (1907 TO DATE)
7 REFERENCES IN FILE CAPLUS (1907 TO DATE)

L16 ANSWER 8 OF 17 REGISTRY COPYRIGHT 2004 ACS on STN
RN **119410-84-3** REGISTRY
CN Uridine, 5-methyl-2'-C-methyl- (9CI) (CA INDEX NAME)
FS STEREOSEARCH
MF C11 H16 N2 O6
SR CA
LC STN Files: BEILSTEIN*, CA, CAPLUS, TOXCENTER, USPATFULL
(*File contains numerically searchable property data)
DT.CA CAplus document type: Journal; Patent
RL.P Roles from patents: BIOL (Biological study); PREP (Preparation); USES (Uses)
RL.NP Roles from non-patents: PREP (Preparation); PRP (Properties)

Absolute stereochemistry.



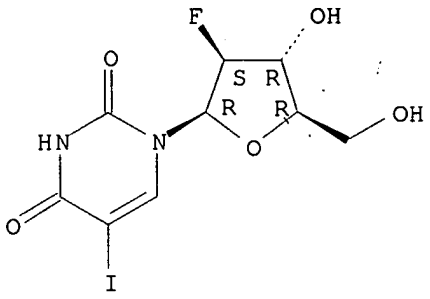
PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

7 REFERENCES IN FILE CA (1907 TO DATE)
7 REFERENCES IN FILE CAPLUS (1907 TO DATE)

L16 ANSWER 9 OF 17 REGISTRY COPYRIGHT 2004 ACS on STN
RN **69123-98-4** REGISTRY
CN 2,4(1H,3H)-Pyrimidinedione, 1-(2-deoxy-2-fluoro-β-D-arabinofuranosyl)-5-iodo- (9CI) (CA INDEX NAME)
OTHER NAMES:
CN 1-(2'-Deoxy-2'-fluoro-β-D-arabinofuranosyl)-5-iodouracil
CN 1-(2-Deoxy-2-fluoro-β-D-arabinofuranosyl)-5-iodouracil
CN 5-Iodo-2'-fluoroarauracil
CN Fialuridine
CN FIAU
CN Fluoroiodoarauracil
CN NSC 678514
FS STEREOSEARCH
DR 129049-36-1
MF C9 H10 F I N2 O5
CI COM
LC STN Files: ADISINSIGHT, ADISNEWS, AGRICOLA, BEILSTEIN*, BIOBUSINESS, BIOSIS, BIOTECHNO, CA, CANCERLIT, CAPLUS, CASREACT, CIN, DDFU, DRUGU, EMBASE, IMSDRUGNEWS, IMSRESEARCH, IPA, MEDLINE, MRCK*, PHAR, PROMT, PROUSDDR, RTECS*, TOXCENTER, USAN, USPAT2, USPATFULL, VETU

(*File contains numerically searchable property data)
DT.CA CAplus document type: Conference; Dissertation; Journal; Patent
RL.P Roles from patents: BIOL (Biological study); PREP (Preparation); PROC (Process); PRP (Properties); RACT (Reactant or reagent); USES (Uses)
RLD.P Roles for non-specific derivatives from patents: BIOL (Biological study); PREP (Preparation); USES (Uses)
RL.NP Roles from non-patents: ANST (Analytical study); BIOL (Biological study); PREP (Preparation); PROC (Process); PRP (Properties); RACT (Reactant or reagent); USES (Uses)
RLD.NP Roles for non-specific derivatives from non-patents: ANST (Analytical study); BIOL (Biological study); PROC (Process); USES (Uses)

Absolute stereochemistry.

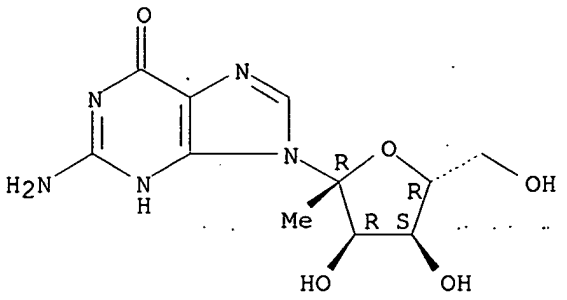


PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

178 REFERENCES IN FILE CA (1907 TO DATE)
14 REFERENCES TO NON-SPECIFIC DERIVATIVES IN FILE CA
178 REFERENCES IN FILE CAPLUS (1907 TO DATE)

L16 ANSWER 10 OF 17 REGISTRY COPYRIGHT 2004 ACS on STN
RN **54401-19-3** REGISTRY
CN Guanosine, 1'-C-methyl- (9CI) (CA INDEX NAME)
OTHER CA INDEX NAMES:
CN 6H-Purin-6-one, 2-amino-9-(1-deoxy-β-D-psicofuranosyl)-1,9-dihydro-
FS STEREOSEARCH
MF C11 H15 N5 O5
LC STN Files: BEILSTEIN*, CA, CAPLUS, TOXCENTER, USPATFULL
(*File contains numerically searchable property data)
DT.CA CAplus document type: Journal; Patent
RL.P Roles from patents: BIOL (Biological study); PREP (Preparation); USES (Uses)
RL.NP Roles from non-patents: RACT (Reactant or reagent)

Absolute stereochemistry.

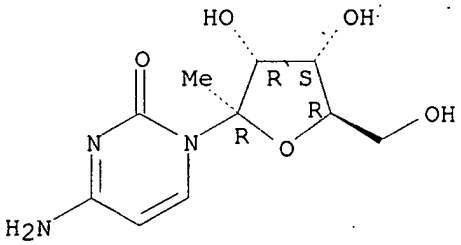


PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

3 REFERENCES IN FILE CA (1907 TO DATE)
3 REFERENCES IN FILE CAPLUS (1907 TO DATE)

L16 ANSWER 11 OF 17 REGISTRY COPYRIGHT 2004 ACS on STN
RN **38946-84-8** REGISTRY
CN Cytidine, 1'-C-methyl- (9CI) (CA INDEX NAME)
OTHER CA INDEX NAMES:
CN 2(1H)-Pyrimidinone, 4-amino-1-(1-deoxy-β-D-psicofuranosyl)-
OTHER NAMES:
CN 1-(1-Deoxy-β-D-psicofuranosyl)cytosine
FS STEREOSEARCH
MF C10 H15 N3 O5
LC STN Files: CA, CAPLUS, TOXCENTER, USPATFULL
DT.CA CAplus document type: Journal; Patent
RL.P Roles from patents: BIOL (Biological study); PREP (Preparation); USES (Uses)
RL.NP Roles from non-patents: RACT (Reactant or reagent)

Absolute stereochemistry.



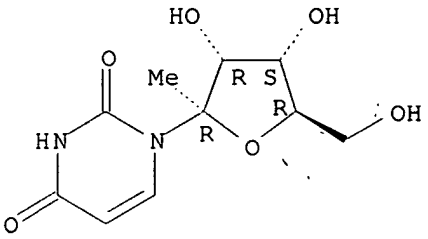
PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

3 REFERENCES IN FILE CA (1907 TO DATE)
3 REFERENCES IN FILE CAPLUS (1907 TO DATE)

L16 ANSWER 12 OF 17 REGISTRY COPYRIGHT 2004 ACS on STN
RN **38946-83-7** REGISTRY
CN Uridine, 1'-C-methyl- (9CI) (CA INDEX NAME)
OTHER CA INDEX NAMES:
CN 2,4(1H,3H)-Pyrimidinedione, 1-(1-deoxy-β-D-psicofuranosyl)-

OTHER NAMES:
CN 1-(1-Deoxy-β-D-psicofuranosyl)uracil
FS STEREOSEARCH
MF C10 H14 N2 O6
LC STN Files: CA, CAPLUS, TOXCENTER, USPATFULL
DT.CA CAplus document type: Journal; Patent
RL.P Roles from patents: BIOL (Biological study); PREP (Preparation); USES (Uses)
RL.NP Roles from non-patents: RACT (Reactant or reagent)

Absolute stereochemistry.

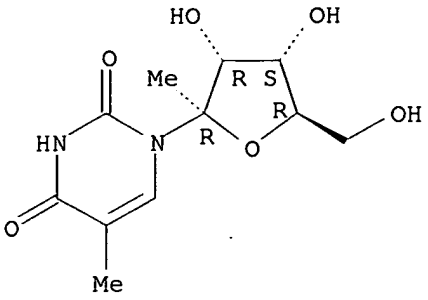


PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

3 REFERENCES IN FILE CA (1907 TO DATE)
3 REFERENCES IN FILE CAPLUS (1907 TO DATE)

L16 ANSWER 13 OF 17 REGISTRY COPYRIGHT 2004 ACS on STN
RN **34441-68-4** REGISTRY
CN Uridine, 5-methyl-1'-C-methyl- (9CI) (CA INDEX NAME)
OTHER CA INDEX NAMES:
CN 2,4(1H,3H)-Pyrimidinedione, 1-(1-deoxy-β-D-psicofuranosyl)-5-methyl-
CN Thymine, 1-(1-deoxy-β-D-psicofuranosyl)- (8CI)
OTHER NAMES:
CN 1-(1-Deoxy-β-D-psicofuranosyl)thymine
FS STEREOSEARCH
MF C11 H16 N2 O6
LC STN Files: BEILSTEIN*, BIOSIS, CA, CAPLUS, CASREACT, CHEMINFORMRX, TOXCENTER, USPATFULL
(*File contains numerically searchable property data)
DT.CA CAplus document type: Journal; Patent
RL.P Roles from patents: BIOL (Biological study); PREP (Preparation); USES (Uses)
RL.NP Roles from non-patents: PREP (Preparation); PRP (Properties); RACT (Reactant or reagent)

Absolute stereochemistry.

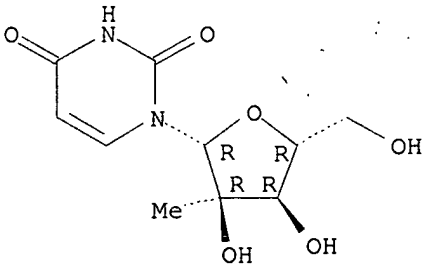


PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

9 REFERENCES IN FILE CA (1907 TO DATE)
9 REFERENCES IN FILE CAPLUS (1907 TO DATE)

L16 ANSWER 14 OF 17 REGISTRY COPYRIGHT 2004 ACS on STN
RN **31448-54-1** REGISTRY
CN Uridine, 2'-C-methyl- (8CI, 9CI) (CA INDEX NAME)
OTHER NAMES:
CN 2'-C-Methyluridine
FS STEREOSEARCH
MF C10 H14 N2 O6
LC STN Files: BEILSTEIN*, CA, CAPLUS, CASREACT, TOXCENTER, USPATFULL
(*File contains numerically searchable property data)
DT.CA CAplus document type: Journal; Patent
RL.P Roles from patents: BIOL (Biological study); PREP (Preparation); USES (Uses)
RL.NP Roles from non-patents: BIOL (Biological study); PREP (Preparation); PROC (Process); PRP (Properties); RACT (Reactant or reagent)

Absolute stereochemistry.



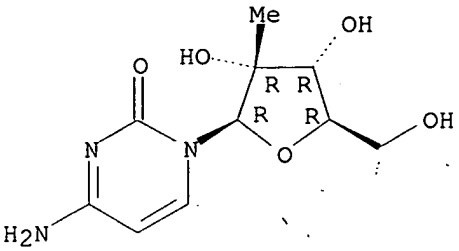
PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

21 REFERENCES IN FILE CA (1907 TO DATE)
21 REFERENCES IN FILE CAPLUS (1907 TO DATE)

L16 ANSWER 15 OF 17 REGISTRY COPYRIGHT 2004 ACS on STN
RN **20724-73-6** REGISTRY
CN Cytidine, 2'-C-methyl- (8CI, 9CI) (CA INDEX NAME)
FS STEREOSEARCH
MF C10 H15 N3 O5

LC STN Files: BEILSTEIN*, CA, CAPLUS, CASREACT, TOXCENTER, USPATFULL
(*File contains numerically searchable property data)
DT.CA CAplus document type: Journal; Patent
RL.P Roles from patents: BIOL (Biological study); PREP (Preparation); RACT (Reactant or reagent); USES (Uses)
RL.NP Roles from non-patents: BIOL (Biological study); PREP (Preparation); RACT (Reactant or reagent)

Absolute stereochemistry.

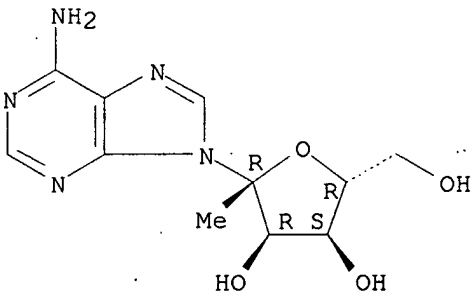


PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

15 REFERENCES IN FILE CA (1907 TO DATE)
15 REFERENCES IN FILE CAPLUS (1907 TO DATE)

L16 ANSWER 16 OF 17 REGISTRY COPYRIGHT 2004 ACS on STN
RN **16848-12-7** REGISTRY
CN Adenosine, 1'-C-methyl- (9CI) (CA INDEX NAME)
OTHER CA INDEX NAMES:
CN Adenine, 9-(1-deoxy-β-D-psicofuranosyl)- (8CI)
FS STEREOSEARCH
MF C11 H15 N5 O4
LC STN Files: BEILSTEIN*, CA, CAPLUS, CASREACT, TOXCENTER, USPATFULL
(*File contains numerically searchable property data)
DT.CA CAplus document type: Journal; Patent
RL.P Roles from patents: BIOL (Biological study); PREP (Preparation); USES (Uses)
RL.NP Roles from non-patents: BIOL (Biological study); PREP (Preparation)

Absolute stereochemistry.

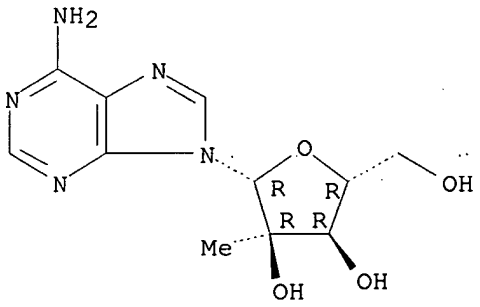


PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

4 REFERENCES IN FILE CA (1907 TO DATE)
4 REFERENCES IN FILE CAPLUS (1907 TO DATE)

L16 ANSWER 17 OF 17 REGISTRY COPYRIGHT 2004 ACS on STN
RN **15397-12-3** REGISTRY
CN Adenosine, 2'-C-methyl- (8CI, 9CI) (CA INDEX NAME)
OTHER NAMES:
CN 2'-C-Methyladenosine
FS STEREOSEARCH
MF C11 H15 N5 O4
LC STN Files: BEILSTEIN*, CA, CAPLUS, CASREACT, IFICDB, IFIPAT, IFIUDB, TOXCENTER, USPATFULL
(*File contains numerically searchable property data)
DT.CA CAplus document type: Journal; Patent
RL.P Roles from patents: BIOL (Biological study); PREP (Preparation); RACT (Reactant or reagent); USES (Uses)
RL.NP Roles from non-patents: BIOL (Biological study); PREP (Preparation); PRP (Properties); RACT (Reactant or reagent); USES (Uses)

Absolute stereochemistry.



PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

23 REFERENCES IN FILE CA (1907 TO DATE)
23 REFERENCES IN FILE CAPLUS (1907 TO DATE)